

REMARKS

This paper is submitted in response to the Office Action mailed on June 29, 2007. Claims 33, 34, and 37 have been amended. Claims 1-7 and 31-37 now remain in the application. In view of the foregoing amendments, as well as the following remarks, Applicant respectfully submits that this application is in complete condition for allowance and requests reconsideration of the application in this regard.

Claims 1-7, of which claim 1 is independent, stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Publication 2002/0143329 to Serhan et al. ("Serhan"). The Office Action asserts:

Serhan et al. disclose a monolithic device useable to connect adjacent vertebrae comprising a stabilization member (5) and a first and second anchoring portions (15/17) that are monolithically connected (7/9) to the stabilization member. The first and second anchoring members extend perpendicularly from the stabilization member. The device may be used to support adjacent vertebrae (see Fig. 7). Serhan et al. also disclose a monolithic device that is considered porous (see par. 0063, wherein at least collagen would inherently be porous). The anchoring members are also substantially cylindrical.

(Office Action, pg. 2). Applicant respectfully disagrees.

In particular, Serhan fails to teach or suggest each element specifically recited in independent claim 1 in the manner suggested in the Office Action. More specifically, Applicant respectfully disagrees with the Office Action's assertion that Fig. 2A of Serhan discloses a monolithic device. As commonly understood in the art, a monolithic apparatus is one cast as a single piece or formed of a material without joints or seams. "monolithic." *Merriam-Webster Online Dictionary*. 2006-2007. <<http://www.merriam-webster.com>> (05 Sept. 2007). The Office Action specifically cites Serhan Fig. 2A parts 7 and 9 as monolithically connected to the stabilization member.

However, as defined above, to be monolithic the apparatus must be cast as a single piece without joints or seams; therefore, it is not possible to monolithically connect pieces that were originally cast separately. Serhan Fig. 2A, provided below for convenience, clearly illustrates a joint or seam between upper surface 6 of the bone fastener and the terminus 8 of the end portion of the ligament body. Additionally, Serhan Fig. 7, also cited by the Office Action and provided below, illustrates a similar joint or seam by a line and contrast-shading schemes between the bone fastener and the ligament body.

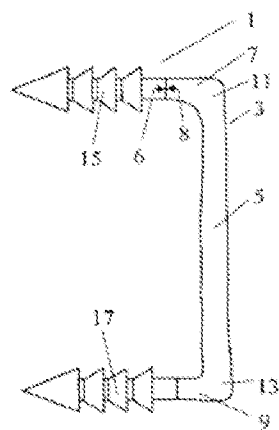


FIG. 2a

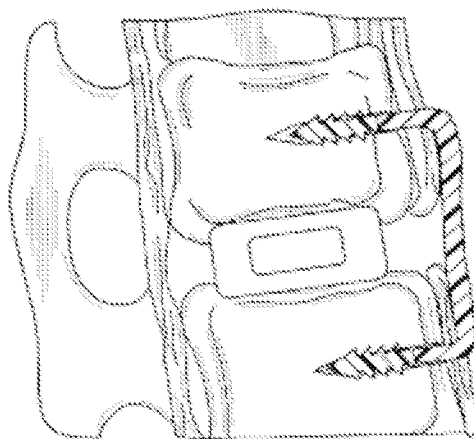


FIG. 7

The joint or seam structure is further exemplified by Fig. 2c wherein the attachment end 27 of the bone fastener 19 is structured to accept a driver element to aid insertion into the bone and prior to connection to the ligament.

Applicant, on the other hand, claims a monolithic device wherein "said stabilization member, said first anchoring member, and said second anchoring member

form the monolithic device." Accordingly, Serhan fails to teach or suggest each of the elements recited in independent claim 1 in the manner suggested in the Office Action and Applicant respectfully submits that claim 1 should be allowable. Moreover, because claims 2-7 depend from claim 1, and further as each of these claims recites a combination of elements not taught or suggested in Serhan, Applicant respectfully submits that these claims are allowable as well.

Claims 31-37, which each ultimately depend from independent claim 1, stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Serhan in view of U.S. Patent No. 4,743,260 to Burton ("Burton"). Because each of these claims depends from allowable independent claim 1 and further because Burton fails to cure the deficiency in Serhan as discussed above in regard to claim 1, Applicant respectfully submits that these claims are allowable as well.

Moreover, in regard to the rejection of some of these claims, the Office Action asserts that Burton discloses "...biocompatible materials that are porous and aid in the acceptance and incorporation of natural bone (Col. 4, lines 45-52). Having pores, may in and of themselves, be considered a lumen throughout." Applicant respectfully submits that an interpretation that a collection of pores in a body can constitute a "lumen" is overreaching inconsistent with the specification and with the understanding of one of ordinary skill in the art after reading the present specification. However, to advance prosecution of this case, Applicant has amended claims 33, 34, and 37 to more clearly define over Burton in regard to this issue. Such amendments are fully supported within Applicant's specification. (see Application ¶0052).

As amended, claims 33, 34, and 37 now describe a lumen as extending axially through at least one of the anchoring members, both of the anchoring members, and the stabilization member, respectively. A lumen, as known and used within the art, is an inner open space or cavity of a tubular organ. "lumen." *The American Heritage® Stedman's Medical Dictionary*. Houghton Mifflin Company, 2002. <Dictionary.com. reference.com> 05 Sep. 2007. Thus, a lumen extending axially would be understood to be an open space or cavity traversing along a length of the axis of the organ or member. Contrast this with pores, which are minute openings in an animal or plant tissue. "pore." *The American Heritage® Stedman's Medical Dictionary*. Houghton Mifflin Company, 2002. <Dictionary.com <http://dictionary.reference.com>> 05 Sep. 2007. As applied to the present case, one skilled in the art would understand, for example, that the lumen of amended claim 33 would be an open space that extends axially through at least one of said first and second anchoring members, not a network of minute openings throughout the members.

The inclusion of a lumen extending axially is not taught or suggested by Burton. While Burton teaches the use of a porous material to aid in the incorporation of bone growth material, a lumen extending axially as recited by the Claims would not be understood to be a collection of interconnected pores. Burton artificially creates a porous material by a replamineform process. (4:44-52). This process is a technique for replicating the microstructures of carbonate skeletal life forms and would not yield the "lumen" as recited by the Claims. (R. A. White et al., Replamineform: A New Process

for Preparing Porous Ceramic, Metal, and Polymer Prosthetic Materials, 176 Science, May 26, 1972, at 922).

Thus, Applicant respectfully submits that for this further reason claims 33, 34, and 37 are allowable.

Conclusion

In view of the foregoing response including the amendments and remarks, this application is submitted to be in complete condition for allowance and early notice to this affect is earnestly solicited. If the Examiner believes any matter requires further discussion, the Examiner is respectfully invited to telephone the undersigned attorney so that the matter may be promptly resolved.

Applicant does not believe that any fees are due in connection with this response. However, if such petition is due or any fees are necessary, the Commissioner may consider this to be a request for such and charge any necessary fees to deposit account 23-3000.

Respectfully submitted,

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